said host medium being selected from the group consisting of in vitro and cell cultures, said method comprising the introduction of an effective amount of a catecholamine to the host medium to enhance the growth of said bacteria or viruses.

- 24. The method of claim 23 wherein the introduction of said catecholamine acts directly on enhancing the growth of said bacteria or virus.
- 25. The method of claim 23 wherein the growth of a bacteria is enhanced and said bacteria is a Gram-positive bacteria.
- 26. The method of claim 23 wherein the growth of a bacteria is enhanced and said bacteria is a Gram-negative bacteria.
- 27. The method of claim 23 wherein said catecholamine is selected from the group consisting of norepinephrine, epinephrine, and dopamine.
- 28. The method of claim 24 wherein said catecholamine is selected from the group consisting of norepinephrine, epinephrine, and dopamine.
- 29. The method of claim 25 wherein said catecholamine is selected from the group consisting of norepinephrine, dopamine and epinephrine.
- 30. A method of enhancing the growth of Gram-negative bacteria in a host medium said host medium being selected from the group consisting of in vitro and cell cultures, said method comprising the introduction of an effective amount of a catecholamine to the host medium to enhance the growth of said Gram-negative bacteria.
- 31. The method of claim 30 wherein said catecholamine is selected from the group consisting of

norepinephrine, epinephrine and dopamine.

- 32. A method for harvesting the by-products of enhanced growth of bacteria or viruses comprising introducing an effective amount of a catecholamine to an in vitro or cell culture host medium of bacteria or virus to act directly on enhancing the growth of said bacteria or viruses, and collecting by-products generated by said bacteria or viruses.
- 33. The method of claim 32 wherein said introduction of said catecholamine acts directly on enhancing the growth of said bacteria or virus.
- 34. The method of claim 32 wherein a Gram-negative bacteria undergoes said enhanced growth.
- 35. The method of claim 33 wherein a Gram-negative bacteria undergoes said enhanced growth.
- 36. The method of claim 34 wherein said Gram-negative bacteria is selected from the group consisting of E. coli and Y. entercolitica.
- 37. The method of claim 33 wherein an inhibitor is determined which intercedes at any point in a catecholamine biosynthetic pathway, and Gram-negative bacteria are subsequently treated by said inhibitor.
- 38. The method of claim 34 wherein an inhibitor is determined which intercedes at any point in a catecholamine biosynthetic pathway, and Gram-negative bacteria are subsequently treated by said inhibitor.
- 39. The method of claim 33 wherein said catecholamine is selected from the group consisting of norepinephrine, epinephrine, and dopamine.